5',6',7',8'-Tetrahydro-2'-acetonaphthone

Other names:	6-Acetyl tetralin
	Ethanone, 1-(5,6,7,8-tetrahydro-2-naphthalenyl)-
	1-(5,6,7,8-tetrahydro-2-naphthyl)ethan-1-one
Inchi:	InChI=1S/C12H14O/c1-9(13)11-7-6-10-4-2-3-5-12(10)8-11/h6-8H,2-5H2,1H3
InchiKey:	VEPUKHYQNXSSKV-UHFFFAOYSA-N
Formula:	C12H14O
SMILES:	CC(=O)c1ccc2c(c1)CCCC2
Mol. weight [g/mol]:	174.24
CAS:	774-55-0

Physical Properties

Property code	Value	Unit	Source
gf	70.75	kJ/mol	Joback Method
hf	-103.02	kJ/mol	Joback Method
hfus	16.66	kJ/mol	Joback Method
hvap	53.05	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	2.768		Crippen Method
mcvol	146.890	ml/mol	McGowan Method
pc	3025.61	kPa	Joback Method
tb	580.15	K	Joback Method
tc	814.20	K	Joback Method
tf	345.05	K	Joback Method
vc	0.555	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	352.93	J/mol×K	580.15	Joback Method
cpg	369.06	J/mol×K	619.16	Joback Method
cpg	384.06	J/mol×K	658.17	Joback Method
cpg	398.00	J/mol×K	697.17	Joback Method
cpg	410.94	J/mol×K	736.18	Joback Method
cpg	422.96	J/mol×K	775.19	Joback Method

cpg	434.12	J/mol×K	814.20	Joback Method
dvisc	0.0021469	Pa×s	345.05	Joback Method
dvisc	0.0013528	Pa×s	384.23	Joback Method
dvisc	0.0009285	Pa×s	423.42	Joback Method
dvisc	0.0006792	Pa×s	462.60	Joback Method
dvisc	0.0005218	Pa×s	501.78	Joback Method
dvisc	0.0004164	Pa×s	540.97	Joback Method
dvisc	0.0003426	Pa×s	580.15	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C774550&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume